CONSERVATION PLANTS FOR THE NORTHEAST UNITED STATES
USDA - NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PLANT SHEET NE-78

EASTERN GAMAGRASS
(*Tripsacum dactyloides* (L.)L.)
NRCS Plant Symbol: TRDA3

plant Type: Native, perennial, warm-season graee.

Uses: The primary uses of eastern gamagrass are for producing hay and haylage. It is more productive, palatable, and nutritious than the other native perennial warm season grasses. This perennial species doea not require the extensive annual tillage, seeding, and pesticide inputs of silage corn.

NRCS Practice Applications: Paeture & Hayland Planting(512).

Description: Eastern gamagrass is a native, warm-season, perennial bunch grass, related to corn. It can reach heights up to 8 feet. The leaves are 3/8 - 3/4 inches wide and 12-24 inches long, with a well defined midrib. The seed is encapsulated, maturing from June to September. There are *7,500* seeds per pound. The seedheads are 6-10 inches long and are made up of one to several epikee.

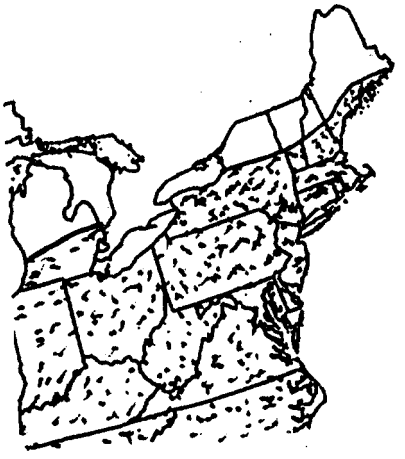
Regional Wetland Indicator Statue: FACW

Varieties: 'Pete' is the only certified cultfvar available, and was developed at the Manhattan, Kaneae Plant Materials Center. 'Iuka' is a proprietary cultivar that is not grown under certification. 'Pete' is preferred for use in the Northeast. Breeding and selection work is underway at Big Flate and Cape May Plant Materials Centers to develop local cultivars, that have enhanced seed and forage production with high quality. Foundation seed of 'Pete' can be obtained from the Manhattan PMC, and certified seed from commercial seed producers.

Adaptation: Gamagrass is native to the eastern U.S., originally extending into southern New York. Some selections do well north of this range, but the limits are not yet known. Gamagraes doee beet in moderately well drained to somewhat poorly drained soils. It will tolerate extended periods of flooding.

Establishment: Site selection must be made carefully before

planting as we learn about adaptation for the Northeast. Gamagraee may be seeded with conventional equipment into a thoroughly prepared seedbed, as would be done for corn. Weed control is essential for successful establishment. Sites formerly in cool-season pastures or hayland ehould be sown without tillage to avoid exposing weed eeeds to good germination conditione.



Plant between May 1 and June 15, once the moil is at least 50 degrees F; early corn planting oeaeon is preferred. A minimum of 10 pound6 pure live seed should be used per acre. Place seed 1-1.5 inches deep in rows spaced 30 inch apart. If inter-planting gamagraes with corn, plant the corn firet at less than 20,000 seede per acre and sow the gamagrase.

The seede must first be Stratified (exposed to cold, wet conditione) for eight weeks before sowing. Seed may be purchased stratified from commercial growers or performed on site. Natural stratification may aleo be achieved by fall planting after November 1, but before froet is in the soil.

Management: To control weeds in pure stands of gamagrass, cultivation works beet, with care taken not to bury the seedlings. If gamagraes is planted with corn, use of good pre-emergent weed control rather than cultivation will be productive. To control perennial cool-season grasses in established stands, woody competition, and some diseases, a controlled burn may be done in the early spring when the gamagrass is about 1 inch tall.

Fertilization to promote gamagraae growth ehould be done after establishment year, to discourage early weed growth. It will quickly respond to nitrogen applications, ueing 100 pounds of nitrogen per acre per year, or about 15 pounds per acre for each ton of dry forage removed. This amount should be a split application: the first half applied when the seedlings are about 5 inches tall, the eecond half at the firet cutting. Phosphorus and potassium ehould be applied according to the soil test recommendations for a 15 ton silage corn yield. Where the gamagrass is planted with corn, fertilize according to corn's needs.

When cutting for hay or haylage, do not cut any lower than 6-8 inches, or later than September 5. The first cutting ehould be at boot stage, with subsequent cuttings 4-8 weeks later depending on production. Gamagrass ehould not be grazed no due to potential overgrazing.

September 1996